

## Statement of Reasons

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### Statement of Reasons for the Renewal of the Environmental Licences Issued to Petuna Aquaculture Pty Ltd for Finfish Farming Activities in Macquarie Harbour

I, Wes Ford, Director, Environment Protection Authority (EPA), provide this statement of reasons in support of each separate decision to renew four environmental licences in Macquarie Harbour (Nos. 9888/2, 9890/2, 9891/2 and 9892/2) under section 42T(1)(a) of the *Environmental Management and Pollution Control Act 1994* (EMPCA) and issue Environmental Licence Nos. 9888/3, 9890/3, 9891/3 and 9892/3 to Petuna Aquaculture Pty Ltd in accordance with section 42ZB(1) of EMPCA.

Each environmental licence has been renewed for a period of two years, to take effect on 30 November 2023, and will remain valid until 30 November 2025, unless otherwise cancelled or varied.

The purpose of this statement is to state the reasons for each decision to renew these environmental licences and the reasons for my decision to impose new conditions and restrictions for the management of dissolved oxygen on each environmental licence renewed.

#### Statutory Requirements for Renewal

I have considered the validity of the applications to renew Environmental Licence Nos. 9888/2, 9890/2, 9891/2 and 9892/2. In accordance with section 42S(1) and section 42S(2) of EMPCA in order for me to consider an application to renew an environmental licence a valid application must be submitted to my office, in an approved form, 60 days before the environmental licence is due to expire.

In each case, the renewal applications for Environmental Licence Nos. 9888/2, 9890/2, 9891/2 and 9892/2 were not provided in an approved form, 60 days before the licences were due to expire. Therefore, in accordance with section 42S(2) of EMPCA the renewal applications for these environmental licences were determined to be invalid.

Petuna Aquaculture Pty Ltd subsequently provided the additional information required to my office on 3 October 2023. As the applications were made in an approved form before the day on which they were due to expire, I have decided to exercise my discretion and accept the renewal applications. Therefore, in accordance with section 42S(3) of EMPCA the applications to renew Environmental Licence Nos. 9888/2, 9890/2, 9891/2 and 9892/2 are, despite section 42S(2), valid.

In accordance with section 42T(3) I have reviewed the current conditions of each environmental licence and I confirm that they do not contain conditions that would prevent me from renewing each licence.

Having been satisfied that I had a valid power to renew or refuse to renew each application I have proceeded to review the available information and advice and to make my decisions.

## Decisions

1. In accordance with section 42T(1)(a) I have renewed these four environmental licences relating to finfish farming activities within Macquarie Harbour held by Petuna Aquaculture Pty Ltd (Nos. 9888, 9890, 9891 and 9892), having been satisfied that it was appropriate to do so and having considered the matters referred to in section 42T of EMPCA.
2. In accordance with section 42T(7) and 42Z I have seen fit to impose new conditions or restrictions on each of these environmental licences requiring the licence holders to determine and mitigate the impacts of marine finfish farming activities on dissolved oxygen levels at and beyond the boundary of the marine farm leases to which each environmental licence relates (conditions DOI, DO2, and DO3), which in my opinion will further the objectives of EMPCA.

## Basis for Decision-making

In making my decision to renew each environmental licence I have:

- a) Reviewed and considered all information submitted by the applicant, submissions provided by stakeholders, the results of prior conviction and interstate and Commonwealth records checks, and records collated by the EPA in order to determine whether the renewal ought be refused because of a relevant contravention of the licence, conviction, or because the applicant is not a fit and proper person to hold an environmental licence.
- b) Reviewed and considered advice from scientific research organisations (i.e., CSIRO, IMAS), Non-Governmental Organisations (NGOs), State and Federal Governments as to whether there are any environmental concerns that would cause me to not be satisfied that it is appropriate to renew the licence.
- c) Reviewed and considered a) and b) above whilst seeking to further the objectives outlined in Schedule I of EMPCA.

A summary of the information and advice supporting the basis for my decision to renew these environmental licences is provided below.

## Summary of Information and Advice

### Compliance history and character of applicants

In making my decision to renew each of the three environmental licences, I have considered the matters referred to in section 42T(4)(a-d) of EMPCA:

- (4) The Director may refuse to renew an environmental licence under [subsection \(1\)](#) if he or she is satisfied that the applicant for renewal of the licence –
  - (a) has contravened the conditions and restrictions of the licence in the 5-year period immediately before the application for renewal of the licence is made; or
  - (b) has, within the 5-year period before the day on which the licence is renewed, been convicted of an offence against –
    - (i) this Act; or
    - (ii) any other Act; or

(iii) a law of another State, a Territory, or the Commonwealth, that relates to the protection of the environment –

which the Director considers to be an offence relevant to the holding of the licence; or

(c) is not a fit and proper person to hold an environmental licence; or

(d) has not paid any fees that are due and payable under this Act, in relation to the licence, by the person.

### **Petuna Aquaculture Pty Ltd – Environmental Licence Nos. 9888, 9890, 9891 and 9892**

Petuna Aquaculture Pty Ltd has ten relevant contraventions of Environmental Licence No. 9888/2 in the five years immediately before the renewal application. The contraventions occurred between 2019-2023 and relate to: presence of bacterial mats, late survey filming, not conducting a triggered environmental survey, excessive feed, and four instances of spontaneous gas bubbling. Relevantly, 196 compliance site and pen bay surveys were conducted over the 5-year period prior to the renewal application (meaning relatively few contraventions were detected for the number of surveys conducted).

Petuna Aquaculture Pty Ltd has nine relevant contraventions of Environmental Licence No. 9890/2 in the five years immediately before the renewal application. These contraventions occurred between 2019-2021 and all relate to the presence of bacterial mats. Relevantly, 190 compliance site and pen bay surveys were conducted over the 5-year period prior to the renewal application (meaning relatively few contraventions were detected for the number of surveys conducted).

Petuna Aquaculture Pty Ltd has twenty relevant contraventions of Environmental Licence No. 9891/2 in the five years immediately before the renewal application. The contraventions occurred between 2019-2022 and relate to: presence of bacterial mats (x17), late report submission and two contraventions for excessive feed. Relevantly, 315 compliance site and pen bay surveys were conducted over the 5-year period prior to the renewal application (meaning relatively few contraventions were detected for the number of surveys conducted).

Petuna Aquaculture Pty Ltd has eight relevant contraventions of Environmental Licence No. 9892/2 in the five years immediately before the renewal application. The contraventions occurred between 2019-2023 and relate to: presence of bacterial mats, excessive feed, and two contraventions for spontaneous gas bubbling. It should be noted that one of the contraventions related to the presence of bacterial mats occurred at a recovery site (i.e. sites impacted by previous farming under a former lease configuration). Recovery sites have not previously been classed as non-compliant by the EPA and no further management responses were required due to operational changes implemented by Petuna Aquaculture Pty Ltd. The EPA intends to take up the matter of recovery sites with the aquaculture companies during 2024. Relevantly, 174 compliance site, recovery site and pen bay surveys were conducted over the 5-year period prior to the renewal application (meaning relatively few contraventions were detected for the number of surveys conducted).

The licence-holder has demonstrated proactive management responses in respect of these contraventions with no further enforcement action being necessary. Petuna Aquaculture Pty Ltd conducted a feed review in response to the excessive feed contraventions identified and have made operational changes based on the findings. I am satisfied that the contraventions identified are not sufficient to warrant refusal to renew the environmental licences, as I consider the contraventions can be, and have been, appropriately managed through conditions and restrictions imposed in the renewed environmental licence.

Petuna Aquaculture Pty Ltd has no relevant convictions under EMPCA and no formal warning notices were issued to the applicant in the five years immediately before the renewal application. Nine convictions

arising from infringement notices have been recorded under other state legislation relating to marine debris and the keeping of records. No convictions have been recorded in the relevant period against Commonwealth legislation. I am satisfied that convictions against other legislation have been appropriately managed by the regulators responsible for the administration of the relevant legislation and laws and that the licence holder has not been excluded from the activity authorised. I consider that the convictions recorded against Petuna Aquaculture Pty Ltd over the previous five years do not demonstrate that it is appropriate to refuse to renew the licences.

I also reviewed the notifications of complaint made to the EPA against Petuna Aquaculture Pty Ltd. There were several complaints made about marine farming activities conducted in Macquarie Harbour in the previous 5-year period, however they are generally made against the industry, and not a specific licence holder. Petuna Aquaculture Pty Ltd hold an additional environmental licence for their freshwater finfish farming operations at Cressy. The EPA have not received any complaints specifically against this licence holder for any of their marine or freshwater finfish farming operations.

I note the convictions and matters referred to above, which I consider relevant, are different from some of the convictions and matters identified in the submission made by Australia Institute Tasmania. A point of difference is that they have referred to contraventions and convictions of the parent company, Sealord Group Ltd, rather than just the applicant company. Another point to make is that many of the contraventions that the Australia Institute Tasmania listed, are not contraventions under the legislation (e.g. fish escapes, mortality events).

In respect of section 42T(4)(d), there are no fees due payable under EMPCA by Petuna Aquaculture Pty Ltd.

I conclude there is no basis to determine that the applicant is not a fit and proper person to hold an environmental licence.

## Other relevant circumstances

Apart from considering the compliance history and character of the applicants, I have reviewed and considered whether there are any environmental concerns raised on the information available to me that would cause me to not be satisfied it was appropriate to renew these licences.

A detailed summary of the relevant scientific knowledge and research I have considered can be found in [Circumstances for Consideration Under section 42T\(5\)](#) and reports referred to therein, which is accessible via the EPA website ([www.epa.tas.gov.au](http://www.epa.tas.gov.au)), or directly via the hyperlinks in this document.

I had particular regard to the following information and advice:

### Water Quality

1. Water quality monitoring information available within Macquarie Harbour since 1993 and associated reports. This includes monitoring undertaken by the EPA, industry as part of their requirement to conduct broadscale monitoring, and scientific research organisations (i.e. CSIRO and Institute for Marine and Antarctic Studies (IMAS)).
2. Review of long-term dissolved oxygen monitoring data from EPA, industry, CSIRO and IMAS.
3. Status of research on water quality dynamics in Macquarie Harbour.
4. The recent conditional approval of the FRDC research project 'Macquarie Harbour Oxygenation Trial' (2023-087) that will inform the capacity to offset oxygen drawdown of individual leases and the total oxygen drawdown of salmonid aquaculture in the harbour.

5. Addition of new conditions and restrictions in these environmental licences to include a set of Dissolved Oxygen Management requirements to ensure that companies are working towards improving water quality in Macquarie Harbour.
6. Development of [Interim Default Guideline Values \(DGVs\)](#) by EPA for managing water quality in Macquarie Harbour.
7. The recent setting of a Total Permissible Dissolved Nitrogen Output (TPDNO) 31 August 2022 and the gradual reduction in biomass in the Harbour since 2017 and the positive effects these management decisions have had on benthic compliance in the harbour.
8. The power I have under EMPCA to further reduce the [Total Permissible Dissolved Nitrogen Output \(TPDNO\) in Macquarie Harbour](#). This would reduce the amount of nitrogen in feed that is discharged into Macquarie Harbour, thereby reducing salmon production and its associated oxygen demand.

### **Status of the Maugean Skate (*Zearaja maugeana*)**

1. The Department of Climate Change, Energy, the Environment and Water (DCCEEW) recently issued updated [Conservation Advice for the Maugean Skate](#) that is in effect under the *Environment Protection and Biodiversity Conservation Act 1999* from 6 September 2023.
2. Department of Natural Resources and Environment Tasmania (NRE Tas) draft Maugean Skate [Conservation Action Plan](#) which was recently circulated confidentially to the [National Recovery Team for the Maugean Skate](#) and the [Environmental Remediation Working Group](#).
3. Recent research and monitoring conducted by the Institute of Marine and Antarctic Studies (IMAS), University of Tasmania including any other reports available to me including the following reports:
  - i. [Moreno et al. \(2020\)](#)
  - ii. [Moreno et al. \(2022\)](#)
  - iii. [Moreno and Semmens \(2023\)](#)

### **Condition of the Seabed**

1. Research conducted by the Institute of Marine and Antarctic Studies (IMAS), University of Tasmania on the interactions of dissolved oxygen concentrations, management of salmon farming, oceanographic processes and benthic condition. This information was reviewed in reports made available to me:
  - i. [Ross et al. 2022](#)
  - ii. [Ross and Macleod 2017](#)
  - iii. [Ross et al. 2016](#) and [Ross et al. 2016](#)
  - iv. [Ross et al. 2015](#)
  - v. See Table I in [Circumstances for Consideration Under section 42T\(5\)](#) for a full list of reports considered.
2. The independent review of broad-scale environmental monitoring programs: Macquarie Harbour ([SAMS International Macquarie Harbour BEMP Review](#))
3. EPA compiled benthic compliance history of salmon farming in Macquarie Harbour
4. EPA compiled data and benthic condition status of harbour wide control sites.

## Submissions

1. Submissions from Non-Governmental Organisations (NGO's).
  - a. Environmental Defenders Office on behalf of the Australian Marine Conservation Society and The Humane Society International Australia (dated 14/9/23 and 15/9/23).
  - b. The Australia Institute Tasmania (dated 15/9/23).
  - c. Equity Generation Lawyers on behalf of the Neighbours of Fish Farming Inc (dated 14/11/23).

## Regulatory Framework going forward

1. [Environmental Standards for Tasmanian Marine Finfish Farming 2023](#)
2. [Biosecurity Program: Tasmanian Salmonid Industry](#)
3. [Standardised Marine Farming Management Controls](#)

## Conclusion Regarding Renewal

I have reviewed and considered the compliance history and character of the applicants as well as the advice provided to me by scientific research organisations, non-governmental organisations and both the State and Federal Governments in making my decision to renew the three Macquarie Harbour environmental licences.

The power under section 42T for the Director to renew, or to refuse to renew an environmental licence must be exercised in such a manner as to further the objectives of EMPCA, set out in [Schedule 1](#). The objectives that I consider are particularly relevant to these renewal applications are:

Under Part 1

- a) To promote the sustainable development<sup>1</sup> of natural and physical resources and the maintenance of ecological processes and genetic diversity; and

Under Part 2

- b) To protect and enhance the quality of the Tasmanian environment; and
- c) To prevent environmental degradation and adverse risks to human and ecosystem health by promoting pollution prevention, clean production technology, reuse and recycling of materials and waste minimization programmes; and
- d) To regulate, reduce or eliminate the discharge of pollutants and hazardous substances to air, land or water consistent with maintaining environmental quality; and
- h) To adopt a precautionary approach when assessing environmental risk to ensure that all aspects of environmental quality, including ecosystem sustainability and integrity and beneficial uses of the environment, are considered in assessing, and making decisions in relation to the environment.

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<sup>1</sup> 'Sustainable development' means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while –

- (a) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
- (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
- (c) avoiding, remedying or mitigating any adverse effects of activities on the environment.

My decision to renew the Macquarie Harbour environmental licences has been a significant exercise in balancing the objectives of EMPCA, which are often conflicting and pull in different directions. Macquarie Harbour has been, and continues to be, impacted by a number of industries such as mining, finfish aquaculture, and hydro-electrical power generation. The impacts from these industries, in conjunction with a number of other factors, such as climate change and gill netting, have contributed to the endangered status of the Maugean Skate.

Each of the aforementioned industries have provided a benefit to the local community by providing jobs which enables people and the communities to provide for their social, economic, and cultural well-being as well as for their health and safety. Removal of one of these industries would have a significant impact on the local community and therefore serious consideration must be given as to whether or not the activities of the industry can be managed, and any environmental impacts mitigated, through the use of the number of tools which the regulatory framework provides.

While I am confident in the ability of the current regulatory framework for Tasmanian finfish aquaculture to ensure that the licence-holders minimise or eliminate the environmental impacts of their activities, the additional information provided regarding the environmental conditions in the harbour and the declining numbers of the endangered Maugean Skate has led me to believe that additional measures need to be implemented immediately, and reviewed in the near future, in order to safeguard the life-supporting capacity of the ecosystem and to mitigate and remedy the adverse effects that finfish farming activities have on the environment. These additional measures are outlined in the next section of this Statement of Reasons.

It is my belief that the mitigation and management conditions that I am requiring the finfish industry to meet will help the dissolved oxygen levels within the harbour to increase. However, the recovery of dissolved oxygen to pre-2010 levels is only likely to be achieved if the environmental impacts of other industries and factors on the harbour are assessed, and if possible, mitigated. One major factor that may be difficult to mitigate, but has significant impact on everything, is climate change. Climate change has resulted in increasing water temperatures within the harbour which has further exacerbated the low dissolved oxygen levels observed. It is my understanding that the Environmental Remediation Working Group, established under the National Recovery Team for the Maugean Skate, has identified and considered these issues and that a number of projects have commenced or are under active consideration.

I have also considered the unintended consequences and subsequent environmental impacts that could occur if I had made the decision to not renew the Macquarie Harbour environmental licences. An operational pause is not a feasible option for the finfish aquaculture industry. If these licences were not renewed, all farmed fish would be required to be removed from the water immediately. Cessation of fish farming would also likely lead to removal of infrastructure (pens and moorings). This action would result in the production of a significant amount of biological and physical waste, that would not only pose a health and biosecurity risk, but it would also pose a risk to the environment. EPA's recent experience has demonstrated that Tasmania does not currently have the capacity to adequately manage the volume of Controlled Waste (such as dead fish) that such an action would produce.

I have also considered that the next year class of finfish are already being held within the freshwater hatcheries and are scheduled to be input into the harbour during 2024. These production schedules are determined several years in advance and although it is likely that some of these smolt could be accommodated on marine farming leases located within other regions of Tasmania, it is also likely that the regional TPDNO caps that I have determined would limit the number of fish that could be redirected. This would result in additional volumes of Controlled Waste requiring management and disposal. In addition, I have also considered that any increases in lease and regional biomass, beyond what is typically farmed in these locations could result in adverse environmental impacts being observed.



In conclusion, I believe that environmental impacts which may occur as a result of fish farming activities in Macquarie Harbour can be appropriately managed utilising the existing licence conditions and other regulatory tools, such as TPDNO Determinations, that are available to me. However, upon reviewing the comprehensive information and advice that I have received regarding the endangered status of the Maugean Skate and dissolved oxygen levels which continue to be significantly below pre-2010 levels, I have adopted a precautionary approach in making this decision and have decided that imposing additional conditions and restrictions on these licences is required.

## **Additional Conditions or Restrictions**

In consideration of the information available to me I have decided to impose additional conditions on each of the four environmental licences to include a set of Dissolved Oxygen Management requirements to ensure that each licence holder is working towards improving water quality in Macquarie Harbour.

Broadly, each licence-holder is required to prepare and submit the documents, listed below, within a set timeframe. The new conditions (DO1, DO2 and DO3) outline in detail what each of these documents must include. The additional conditions, which have been included in the renewed Macquarie Harbour environmental licences, may be viewed by accessing them via [LISTmap - Land Information System Tasmania \(thelist.tas.gov.au\)](http://thelist.tas.gov.au).

1. Dissolved oxygen consumption report (due 31 January 2024)
2. Dissolved oxygen mitigation plan (due 24 April 2024)
3. Water quality monitoring plan (due 24 April 2024)

Once approved, the plans must be implemented and complied with. In addition, I have decided that the renewal period for these environmental licences is to be shorter than initially granted so that the EPA may assess the impact of the new environmental licence conditions requiring the licence holders to determine and mitigate the dissolved oxygen impacts of their operations as well as demonstrate improvements towards conformance with the Interim Default Guideline Values for Macquarie Harbour. Additionally, within this time period, the EPA will also have sufficient data to determine the effectiveness of the current Total Permissible Dissolved Nitrogen Output (TPDNO) cap for Macquarie Harbour, of 500.1 tonnes on benthic conditions. However, if the data shows that a further reduction of the TPDNO is required earlier than the renewal period of these licences, I will issue a new Determination immediately.